

## First example of the synthesis of S,O-macroheterocycle based on 2(5H)-furanone and 2,2'-oxydiethanethiol

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### Abstract

© 2016, Springer Science+Business Media New York. A base-catalyzed reaction of 3,4-dichloro-5-methoxy- and 3,4-dichloro-5-ethoxy-2(5H)-furanones with 2,2'-oxydiethanethiol gave thiols and bis-thioethers of 2(5H)-furanone series. A new S,O-macroheterocyclic compound containing a 18-membered oxathiamacrocycle and two 2(5H)-furanone fragments was synthesized based on the thiols in an aqueous solution of potassium hydroxide, which was characterized by X-ray diffraction.

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### Keywords

2(5H)-furanones, 2,2'-oxydiethanethiol, bis-thioethers, lactones, macrocyclization, macroheterocycles, single crystal X-ray diffraction, thiolation, thiols